

### REMARKS

Claims 8-16 are pending in the present application. Favorable reconsideration of the patentability of the claims 8-16 in view of the present Response is respectfully solicited.

### Office Action

The Office has rejected claims 8-16 as being unpatentable under 35 USC Section 103(a) over Saebo (US 2001/0025113) in view of Reaney (US 6,414,171).

The rejection is respectfully traversed.

As discussed at page 1, lls. 10-22 in the specification, conjugated linoleic acid ("CLA") has been generally produced from triglycerides which have a high percentage content of linoleic acid, sourced from, for example, sunflower oil. The triglycerides are isomerized in the presence of basic catalysts and then saponified. A disadvantage of this process is that the saponification step yields many unwanted waste materials and requires large quantities of alkali. In processes which utilize linoleic acid alkyl esters as the starting material, reactor capacity is often very poor and disadvantageously requires large volumes of water and results in poor yield of CLA and undesirable secondary products.

As noted by the Office, Saebo discloses a process of making CLA at Example 4. The starting material is sunflower oil. Saponification is carried out as described above with a large excess of NaOH. The saponification step of Saebo is followed by neutralization with HCl.

Reaney is the secondary reference and discloses a process for the preparation of CLA. As with Saebo, Reaney utilizes various sources of vegetable oil, such as sunflower, as a source of linoleic acid. See Col. 3, lls. 7-10.

Reaney broadly teaches that one can neutralize the reaction mixture by the addition of a mineral or an organic acid. See Col. 3, lls. 35-37. It is further described that "acids that may be used include, but are not limited to, hydrochloric acid, sulfuric



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acid, phosphoric acid and citric acid (emphasis added)."


By way of comparison, the present invention has surprisingly discovered that the neutralization of a saponification product of CLA lower alkyl esters with phosphoric acid provides excellent utilization of reactor capacity in the production of CLA. Reverse esterification after saponification is also minimized, advantageously resulting in few undesired secondary reaction products. After neutralization with phosphoric acid, as called for by claims 8-16, a CLA product of high yield and purity is obtained, as shown in the Example.

The combination of Saebo and Reaney does not teach or suggest the claimed invention in view of their broad generic teachings of suitable acids for use in the neutralization step of making CLA. The prior art teachings thus would not lead one of skill in the art to the process of claims 8-16 of the present invention.

It is therefore respectfully submitted that claims 8-16 are patentable over the combination of Saebo and Reaney. The Examiner is kindly requested to reconsider and withdraw the rejection.

Favorable reconsideration is therefore respectfully solicited.

Respectfully submitted,

  
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